U.S. Department of Energy
Office of River Protection
P.O. Box 450
Richland, Washington 99352

02-OSR-0209

Mr. Ron F. Naventi, Project Manager
Bechtel National, Inc.
3000 George Washington Way
Richland, Washington 99352

Dear Mr. Naventi:

CONTRACT NO. DE-AC27-01RV14136 - OFFICE OF SAFETY REGULATION (OSR) APPROVAL OF BECHTEL NATIONAL, INC (BNI) AUTHORIZATION BASIS CHANGE NOTICES ABCN-24590-01-00007, REVISION 0, 24590-WTP-ABCN-ESH-01-022, REVISION 0, 24590-WTP-ABCN-ESH-02-007, REVISION 0, 24590-WTP-ABCN-ESH-02-008, REVISION 0, 24590-WTP-ABCN-ESH-02-009, REVISION 0

References:
1. BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Transmitted for Approval – Authorization Basis Change Notice ABCN-24590-01-00007, Revision 0," CCN 023763, October 19, 2001.

2. BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Transmitted for Approval: Authorization Basis Change Notices 24590-WTP-ABCN-ESH-01-022, Revision 0, 24590-WTP-ABCN-ESH-02-007, Revision 0, 24590-WTP-ABCN-ESH-02-008, Revision 0, and 24590-WTP-ABCN-ESH-02-009, Revision 0," CCN 030601, April 18, 2002.

The U.S. Department of Energy, Office of River Protection, Office of Safety Regulation (OSR) has reviewed Authorization Basis Change Notice ABCN-24590-01-00007, Revision 0, submitted to OSR in Reference 1, and Authorization Basis Change Notices 24590-WTP-ABCN-ESH-01-022, Revision 0, 24590-WTP-ABCN-ESH-02-007, Revision 0, 24590-WTP-ABCN-ESH-02-008, Revision 0, and 24590-WTP-ABCN-ESH-02-009, Revision 0, submitted to OSR in Reference 2. The proposed changes consist of the following: (1) revising the Implementing Codes and Standards sections for SRD Safety Criterion 7.7-1 through 7.7-9; (2) revising Policy Q-02.1, Quality Assurance Program; (3) revising SRD Safety Criterion 7.3-12; (4) revising the Integrated Safety Management Plan (ISMP); (5) tailoring of proposed implementing standards; (6) proposed corrections to the Implementing Codes and Standards sections for SRD Safety Criterion 4.4-11, 4.4-12, and 4.4-21; (7) updating and editing SRD Safety Criterion 2.0-2; and (8) adding ITS soil compaction testing for any area on the site to LCAR Section 1.3.1.2.5.

Based upon OSR's evaluation of the proposed changes, OSR has found the proposed changes to be acceptable, with the exception of the addition of the following statement to Section 3.3.3.1 a.1. in the ISMP, "Safety functions of Risk Reduction Class (RRC) SSCs are typically described in Chapter 3 of the SAR." Deletion of this statement is a condition of approval. For the

acceptable changes, OSR has concluded that there is reasonable assurance that the health and safety of the public and the workers, and the environment will not be adversely affected by those changes, and that they comply with applicable laws, regulations, and RPP-WTP contractual requirements. Attached is OSR's Safety Evaluation Report for the proposed changes.

As part of the amendment implementation process, please submit within 14 days of receipt of this letter the revised pages of the SRD, the ISMP, Policy Q-02.1, and the LCAR, and the revision pages for each document, identifying all revisions to date. This amendment is effective immediately and shall be fully implemented within 30 days, i.e., the provisions of the amendment may be used immediately; within 30 days, controlled copies of the SRD, the ISMP, Policy Q-02.1, the LCAR, and subordinate documents must be modified to reflect the changes associated with this amendment.

If you have any questions please contact Dr. Walter Pasciak, OSR, (509) 373-9189. Nothing in this letter should be construed as changing the Contract, DE-AC27-01RV14136. If, in my capacity as the Safety Regulation Official, I provide any direction that your company believes exceeds my authority or constitutes a change to the Contract, you will immediately notify the Contracting Officer and request clarification prior to complying with the direction.

Sincerely,

Robert C. Barr
Safety Regulation Official
Office of Safety Regulation

OSR:WJP

Attachment

Safety Evaluation Report (SER)
Of Proposed Authorization Basis Change Notices
ABCN-24590-01-00007, Revision 0
24590-WTP-ABCN-ESH-01-022, Revision 0
24590-WTP-ABCN-ESH-02-007, Revision 0
24590-WTP-ABCN-ESH-02-008, Revision 0
24590-WTP-ABCN-ESH-02-009, Revision 0
For the River Protection Project-Waste Treatment Plant
By the Office of Safety Regulation

1.0 INTRODUCTION

The River Protection Project-Waste Treatment Plant (RPP-WTP) authorization basis is the composite of information, provided by the Contractor in response to radiological, nuclear, and process safety requirements, that is the basis on which the Office of Safety Regulation (OSR) Safety Regulation Official grants permission to perform regulated activities. The authorization basis includes that information requested by the Contractor for inclusion in the authorization basis and subsequently accepted by OSR. The authorization basis for the RPP-WTP includes the Safety Requirements Document (SRD) and the Integrated Safety Management Plan (ISMP). The SRD contains the approved set of radiological, nuclear and process safety standards and requirements, which if implemented, provide adequate protection of workers, the public, and the environment against the hazards associated with the operation of the facility. The ISMP contains the safety management practices developed specifically for the project in the areas of design, construction, commissioning, and operation. The Limited Construction Authorization Request (LCAR) is one of the authorization basis documents. The Contractor is required to update the LCAR whenever the scope of work described in the LCAR changes, and to request OSR approval of the changes. By letters dated October 19, 2001, and April 18, 2002, Bechtel National, Inc., (the Contractor) submitted proposed changes to the SRD, the ISMP, Policy Q-02.1, and the LCAR. This SER documents OSR's evaluation of the changes proposed by the Contractor.

2.0 BACKGROUND

The SRD contains the set of radiological, nuclear, and process safety standards necessary to ensure adequate protection of the health and safety of workers, co-located workers, the public, and the environment from radiological, nuclear, and process hazards. The SRD standards are developed via an iterative process. Included in the development process is a continuing review of industry practices, particularly those referenced in the SRD, and review of the results of the process hazards and accident analyses as they evolve with the design of the facility for potential impacts on the SRD standards used to ensure protection of the public, workers, and the environment.

The Contractor has proposed changes to the SRD, consisting of the following: (1) revising the Implementing Codes and Standards sections for SRD Safety Criterion 7.7-1 through 7.7-9; (2) revising SRD Safety Criterion 7.3-12; (3) tailoring of proposed implementing standards in SRD

Volume II, Appendix C; (4) proposed corrections to the Implementing Codes and Standards sections for SRD Safety Criterion 4.4-11, 4.4-12, and 4.4-21; and (5) updating and editing SRD Safety Criterion 2.0-2.

The Contractor has also proposed changes to the LCAR, which defines the work to be performed by the Contractor during limited construction. This work includes activities to prepare the site, complete major excavation, place mud mats, and prepare temporary and permanent facilities needed to support construction of primary process facilities. The changes to LCAR Section 1.3.1.2.5 add ITS soil compaction testing for any area on the site.

The Contractor has also proposed changes to Policy Q-02.1, Quality Assurance Program, which has been established to control the activities performed within the scope of designing, constructing, and pre-operational testing the WTP. The proposed changes to the Quality Assurance Program restore consistency with the wording of 10CFR830 Subpart A.

The Contractor has also proposed changes to the ISMP for consistency and compliance with 10CFR830, Subpart A and RL/REG-97-13 Rev. 8.

OSR's evaluation of the proposed changes to the SRD, the ISMP, Policy Q-02.1, and the LCAR is documented in the following sections of this Safety Evaluation Report.

3.0 EVALUATION

3.1 ABCN-24590-01-00007, Revision 0

3.1.1 Proposed change to SRD Safety Criterion 7.7-1:

Description of Change:
Under the Implementing Codes and Standards section, delete, "24590-WTP-ISMP-ESH-01-001, Integrated Safety Management Plan" and its referenced sections, and add, "DOE Manual 232.1-1A, Occurrence Reporting and Processing of Operations Information, as tailored in SRD Volume II, Appendix C."

Evaluation: (Acceptable)
The proposed revision is acceptable because the information in DOE Manual 232.1-1A is adequate and similar to the ISMP program description. Section 5.2 of DOE Manual 232.1-1A requires categorization of the incident within 2 hours, and this initiates an investigation. Section 5.5 of the DOE manual describes an acceptable process for conducting the investigation and analysis. The proposed change is not a reduction in commitment or effectiveness.

3.1.2 Proposed change to SRD Safety Criterion 7.7-2:

Description of Change:
Under the Implementing Codes and Standards section, delete, "24590-WTP-ISMP-ESH-01-001, Integrated Safety Management Plan" and its referenced sections and chapter, and add, "DOE

Manual 232.1-1A, Occurrence Reporting and Processing of Operations Information, as tailored in SRD Volume II, Appendix C."

Evaluation: (Acceptable)
The proposed revision is acceptable because the information in DOE Manual 232.1-1A is adequate and similar to the ISMP program description. Section 5.5a of DOE Manual 232.1-1A states the facility manager should consider a graded approach for the level of effort for the investigation, and Section 10 of the DOE manual provides a description of required information. The proposed change is not a reduction in commitment or effectiveness.

3.1.3 Proposed change to SRD Safety Criterion 7.7-3:

Description of Change:
Under the Implementing Codes and Standards section, delete, "24590-WTP-ISMP-ESH-01-001, Integrated Safety Management Plan" and its referenced section, and add, "DOE Manual 232.1-1A, Occurrence Reporting and Processing of Operations Information, as tailored in SRD Volume II, Appendix C."

Evaluation: (Acceptable)
The proposed revision is acceptable because the information in DOE Manual 232.1-1A is adequate and similar to the ISMP program description. Section 5.5 of DOE Manual 232.1-1A describes requirements for occurrence investigation and analysis, and Section 5.6 of the DOE manual requires that the final report must document a) the significance, nature, and extent of the event; b) the cause(s) of the event; c) corrective actions to be taken; and d) lessons learned. The proposed change is not a reduction in commitment or effectiveness.

3.1.4 Proposed change to SRD Safety Criterion 7.7-4:

Description of Change:
Under the Implementing Codes and Standards section, delete, "24590-WTP-ISMP-ESH-01-001, Integrated Safety Management Plan" and its referenced section, and add, "DOE Manual 232.1-1A, Occurrence Reporting and Processing of Operations Information, as tailored in SRD Volume II, Appendix C."

Evaluation: (Acceptable)
The proposed revision is acceptable because the information in DOE Manual 232.1-1A is adequate and similar to the ISMP program description. Section 5.2 of DOE Manual 232.1-1A requires the facility manager to categorize an occurrence within 2 hours of identification, and Section 9 of the DOE manual provides a minimum set of requirements necessary to develop local procedures to categorize the occurrences. The proposed change is not a reduction in commitment or effectiveness.

3.1.5 Proposed change to SRD Safety Criterion 7.7-5:

Description of Change:
Under the Implementing Codes and Standards section, delete, "24590-WTP-ISMP-ESH-01-001, Integrated Safety Management Plan" and its referenced section, and add, "DOE Manual 232.1-1A, Occurrence Reporting and Processing of Operations Information, as tailored in SRD Volume II, Appendix C."

Evaluation: (Acceptable)
The proposed revision is acceptable because the information in DOE Manual 232.1-1A is adequate and similar to the ISMP program description. Section 5.3 of DOE Manual 232.1-1A is titled "DOE Oral Notifications" and describes requirements to accomplish this. The proposed change is not a reduction in commitment or effectiveness.

3.1.6 Proposed change to SRD Safety Criterion 7.7-6:

Description of Change:
Under the Implementing Codes and Standards section, delete, "24590-WTP-ISMP-ESH-01-001, Integrated Safety Management Plan" and its referenced section, and add, "DOE Manual 232.1-1A, Occurrence Reporting and Processing of Operations Information, as tailored in SRD Volume II, Appendix C."

Evaluation: (Acceptable)
The proposed revision is acceptable because the information in DOE Manual 232.1-1A is adequate and similar to the ISMP program description. Sections 5.4, 5.6, and 10 of DOE Manual 232.1-1A describe requirements for written notifications, final occurrence report, and contents of occurrence reports. The proposed change is not a reduction in commitment or effectiveness.

3.1.7 Proposed change to SRD Safety Criterion 7.7-7:

Description of Change:
Under the Implementing Codes and Standards section, delete, "24590-WTP-ISMP-ESH-01-001, Integrated Safety Management Plan" and its referenced sections, and add, "DOE Manual 232.1-1A, Occurrence Reporting and Processing of Operations Information, as tailored in SRD Volume II, Appendix C."

Evaluation: (Acceptable)
The proposed revision is acceptable because the information in DOE Manual 232.1-1A is adequate and similar to the ISMP program description. Section 8 of DOE Manual 232.1-1A describes requirements for implementing procedures and states that such procedures shall be submitted to DOE for approval. The proposed change is not a reduction in commitment or effectiveness.

3.1.8 Proposed change to SRD Safety Criterion 7.7-8:

Description of Change:
Under the Implementing Codes and Standards section, delete, "24590-WTP-ISMP-ESH-01-001, Integrated Safety Management Plan" and its referenced section, and add, "DOE Manual 232.1-1A, Occurrence Reporting and Processing of Operations Information, as tailored in SRD Volume II, Appendix C."

Evaluation: (Acceptable)
The proposed revision is acceptable because the information in DOE Manual 232.1-1A is adequate and similar to the ISMP program description. Section 5 of DOE Manual 232.1-1A states that documentation and distribution requirements can be satisfied by using the centralized unclassified DOE operational data base called the computerized Occurrence Reporting and Processing System (ORPS). Section 7 of the DOE manual describes the use of reportable occurrence information and also states that documentation and distribution requirements are satisfied by use of the ORPS. The proposed change is not a reduction in commitment or effectiveness.

3.1.9 Proposed change to SRD Safety Criterion 7.7-9:

Description of Change:
Under the Implementing Codes and Standards section, delete, "24590-WTP-ISMP-ESH-01-001, Integrated Safety Management Plan" and its referenced section, and add, "DOE Manual 232.1-1A, Occurrence Reporting and Processing of Operations Information, as tailored in SRD Volume II, Appendix C."

Evaluation: (Acceptable)
The proposed revision is acceptable because the information in DOE Manual 232.1-1A is adequate and similar to the ISMP program description. Section 5 of DOE Manual 232.1-1A requires the contractor to ensure that occurrences resulting from activities performed by subcontractors are reported in accordance with provisions of the DOE manual. The requirement also is imposed on subcontractors via BNI's Quality Assurance Program requirements (QAM, Policy Q-04.1, Section 3.2.10.) and by BNI subcontractor procurement documents in accordance with Procedure 24590-WTP-3DP-G068-00010, *Specifying Supplier Quality Assurance Program Requirements*. The proposed change is not a reduction in commitment or effectiveness.

3.1.10 Proposed tailoring of DOE Manual 232.1-1A

Description of Change:
BNI proposes to tailor DOE Manual 232.1-1A by deleting references to DOE Orders or Standards in the DOE manual that are not imposed on BNI by contract or committed to by BNI in an authorization basis document.

Evaluation: (Acceptable)
The tailoring of DOE Manual 232.1-1A proposed by BNI consists of deleting references to DOE Orders or Standards in the DOE manual that are not imposed on BNI by contract or committed to

by BNI in an authorization basis document. The deletions would have no impact on the requirements for reporting and investigating occurrences because the Safety Criteria themselves were not changed and the Orders or Standards that are deleted are not relevant to the implementation of the Safety Criteria that reference DOE Manual 232.1-1 as Implementing Codes and Standards.

3.2 24590-WTP-ABCN-ESH-01-022, Revision 0

3.2.1 Proposed changes to the ISMP Section 3.3.3:

Description of Change:
Remove the wording in ISMP Section 3.3.3 that requires submitting proposed changes to the Quality Assurance Manual (QAM) to DOE for approval if there is a reduction in commitment.

Evaluation: (Acceptable)
The proposed changes are acceptable because they comply with the requirements of 10 CFR 830, Subpart A, and do not affect the OSR guidance for review of the Contractor's QA Program.

3.2.2 Proposed changes to the ISMP Section 3.3.3.1:

Description of Change:
Revise ISMP Section 3.3.3.1 to differentiate proposed AB changes into two types, "facility" and "administrative controls" for consistency with REG/RL-97-13, Rev. 8.

Evaluation: (Acceptable)
The proposed changes are acceptable because they are consistent with the requirements REG/RL-97-13, Rev. 8.

3.2.3 Proposed changes to the ISMP Section 3.3.3.1:

Description of Change:
Add wording to ISMP Section 3.3.3.1 to identify the location in the Safety Analysis Report where safety functions for Safety Design Class, Safety Design Significant, and Risk Reduction Class SSCs are described.

Evaluation: (Partially Acceptable)
The proposed change is acceptable except for the statement, "Safety functions of Risk Reduction Class (RRC) SSCs are typically described in Chapter 3 of the SAR" because the change identifies the location in the SAR where safety functions of SSCs can be found. Deletion of the unacceptable statement above is a condition of approval. The reference to RRC is inappropriate because this concept has not been approved at the time of this evaluation. Its review is being addressed in the review of ABCN, 24590-WTP-ABCN-ESH-001-029.

3.2.4 Proposed changes to the ISMP Section 3.3.3.2:

Description of Change:
Add wording to ISMP Section 3.3.3.2 on AB amendments to require more detailed safety evaluations for SRD changes that potentially result in less protection for workers, the public, or the environment.

Evaluation: (Acceptable)
The proposed changes are acceptable because they comply with the requirements of 10CFR830, Subpart A, and DOE/RL-96-0006.

3.2.5 Proposed changes to the ISMP Section 3.3.3.3:

Description of Change:
Revise ISMP Section 3.3.3.3 to add a requirement to perform a safety evaluation prior to approval of the DTD; also, remove the requirement to create a separate Corrective Action Report for deviations from the AB and to require entering and tracking the DTD using appropriate quality procedures and documentation.

Evaluation: (Acceptable)
The proposed changes are acceptable because they comply with the requirements of 10CFR830, Subpart A, and DOE/RL-96-0006, and are consistent with DOE/RL-91-13, Rev. 8.

3.2.6 Proposed changes to the ISMP:

Description of Change:
Wording and editorial changes related to the changes described in sections 3.2.1 through 3.2.5, above.

Evaluation: (Acceptable)
The wording and editorial changes throughout the ISMP are acceptable because they provide consistency, continuity, and clarity with respect to the changes made in sections 3.2.1 through 3.2.5, above.

3.2.7 Proposed change to the Quality Assurance Manual:

Description of Change:
Remove the wording from the Quality Assurance Manual (QAM), Policy Q-02.1, Section 1.5 that commits to submit proposed changes to the QAM to DOE for approval if there is a reduction in commitment.

Evaluation: (Acceptable)
The proposed changes are acceptable because they comply with the requirements of 10 CFR 830, Subpart A, and do not affect the OSR guidance for review of the Contractor's QA Program.

3.2.8 Proposed changes to SRD Safety Criterion 7.3-12:

Description of Change:
Revise SRD Safety Criterion 7.3-12 to be consistent with 10CFR830, Subpart A. Specifically, the requirement for notifying DOE of changes to the QAM is changed to annual, rather than when the changes are made.

Evaluation: (Acceptable)
The proposed changes are acceptable because they comply with the requirements of 10 CFR 830, Subpart A, and do not affect the OSR guidance for review of the Contractor's QA Program.

3.3 24590-WTP-ABCN-ESH-02-007, Revision 0

3.3.1 Proposed change to SRD Volume II, Appendix C: Implementing Standards:

Description of Change:
Add IEEE 387-1995 to Appendix C: Implementing Standards, and tailor this Nuclear Power Generating Station standard for applicability to the RPP-WTP, SRD safety criteria associated with SDC electrical power system design.

Evaluation: (Acceptable)
IEEE 387-1995 provides design recommendations and criteria specifically for Nuclear Power Generating Stations. Much of the design recommendations and criteria are applicable to the RPP-WTP, but there are references, terminology, and criteria in this standard that are specific to nuclear power generating stations and are not applicable to the RPP-WTP. There are also references, terminology, and criteria that are applicable to the RPP-WTP, but need additional clarification on how they are to be applied. Tailoring this standard to the RPP-WTP and including this tailored standard in Appendix C of the SRD, ensures that the tailored standard will be implemented in a reliable and consistent manner throughout the design and construction of the RPP-WTP. The following table shows the proposed tailoring found to be acceptable.

Table 3.3.1-1

Proposed Tailoring	IEEE 387-1995 Affected Sections
Terminology for "Emergency Power" or "Emergency Power Supply" in the Standard apply to the "Emergency Power" or "Emergency Power Supply" in the RPP-WTP	All Sections
Terminology for RPP-WTP	All Sections
Remove Day Tank as an exclusion	Section 1.1.3(c)
Replace the last words "the design basis events cataloged in the Plant Safety Analysis." with "the design basis events as determined by the ISM review process."	Section 1.2
Replace IEEE 603-1991 with ANSI/ISA-S84-01-1996	Section 2 References

3.3 Design Basis Events. Replace the definition in the standard with the following: Postulated events providing bounding conditions for establishing the performance requirements of structures, systems, and components that are necessary to: 1) ensure the integrity of the safety boundaries protecting the worker; 2) place and maintain the facility in a safe state indefinitely; or 3) prevent or mitigate the event consequences so that the radiological exposures to the general public or the workers would not exceed appropriate limits. The Design-Basis Events also establish the performance requirements of the structures, systems and components whose failure under Design-Basis Event conditions could adversely affect any of the above functions."	Section 3 Definitions
3.4 Design Load. Replace the words 'during and following shutdown of the reactor", from the definition and replace with "during a DBE".	Section 3 Definitions
3.12 Standby Power Supply. Modify the definition to read: This definition applies to the Emergency Power Supply for the RPP-WTP.	Section 3 Definitions
3.15 Emergency Power Supply. Add: The power supply that is selected to furnish electrical energy to the SDC power distribution system when the offsite power source is not available.	Section 3 Definitions
For Item 46, replace with the following: "Monitoring diesel-generator units during a design basis event." For Item 49, replace with the following: "Communication means between the diesel-generator enclosure and the main control room."	Section 4.4, Table 1, Design and application considerations
Replace with the following: The emergency diesel generator will be automated and indication of the safety functions shall be provided to the main control room. Manual control and indication shall be provided external to the main control room.	Section 4.5.2.3, Control Points
Replace the terms "accident conditions" and "non-accident conditions" with "design basis event" and "non-design basis event".	Section 4.5.4, Protection
Safety Injection Actuation Signal test not applicable for RPP-WTP	Section 7.5.5, Safety injection actuation signal (SIAS) test
SIAS and LOOP test not applicable for ROO-WTP	Section 7.5.6, Combined SIAS and LOOP test

3.3.2 Proposed change to SRD Volume II, Appendix C: Implementing Standards:

Description of Change:
Add IEEE 741-1990 to Appendix C: Implementing Standards, and tailor this Nuclear Power Generating Station standard for applicability to the RPP-WTP, SRD safety criteria associated with SDC electrical power system design.

Evaluation: (Acceptable)
IEEE 741-1990 provides design recommendations and criteria specifically for Nuclear Power Generating Stations. Much of the design recommendations and criteria are applicable to the RPP-WTP, but there are references, terminology, and criteria in this standard that are specific to nuclear power generating stations and are not applicable to the RPP-WTP. There are also references, terminology, and criteria that are applicable to the RPP-WTP, but need additional clarification on how they are to be applied. Tailoring this standard to the RPP-WTP and including this tailored standard in Appendix C of the SRD, ensures that the tailored standard will be implemented in a reliable and consistent manner throughout the design and construction of the RPP-WTP. The following table shows the proposed tailoring found to be acceptable.

Table 3.3.2-1

Proposed Tailoring	IEEE 741-1990 Affected Sections
Exclude the following references: IEEE 317-1983, IEEE 415-1986, and IEEE 765-1995	Section 2 References
Include the following references: ANSI/ISA-S84.01-1996	Section 2 References
Add the terms: Execute features: The electrical and mechanical equipment and interconnection that perform a function, associated directly or indirectly with a safety function, upon receipt of a signal from the sense and command features. The scope of the execute features extends from the sense and command features output to and including the actuated equipment-to-process coupling. Sense and command features: The electrical and mechanical components and interconnections involved in generating those signals associated directly or indirectly with the safety functions. The scope of the sense and command features extends from the measured process variables to the execute feature input terminals.	Section 3 Definitions
Delete the reference to IEEE 603	Section 4 General Design Criteria
Replace the first sentence of sub-section (b) with the following: Upon sensing the preferred power supply degradation, the condition shall be alarmed via the RPP-WTP Programmable Protection System, (PPS)	Section 5.1.2, Bus voltage monitoring schemes
The term "standby power supply" refers to emergency diesel generators	Section 5.1.4, Standby power supply protection
Electrical penetration assemblies are not applicable to RPP-WTP	Section 5.4, Primary containment electrical penetration assemblies
Delete reference to IEEE 415	Section 6.2, Preoperational tests

3.3.3 Proposed change to SRD Safety Criterion 4.4-11:

Description of Change:
Add the following to the Implementing Codes and Standards section of Safety Criterion 4.4-11:
- IEEE 344-1987, Recommended Practice for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations
- IEEE 384-1992, Standard Criteria for Independence of Class 1E Equipment and Circuits
- IEEE 387-1995, Standard Criteria for Diesel Generator Units Applied as Standby Power Generating Stations

Evaluation: (Acceptable)
Adding the additional Implementing Codes and Standards is acceptable because the new standards provided criteria to ensure that electric power systems classified as Safety Design Class (SDC) are designed to allow for periodic monitoring.

3.3.4 Proposed change to SRD Safety Criterion 4.4-12:

Description of Change:
Delete the following from the Implementing Codes and Standards section of Safety Criterion 4.4-12:

- IEEE 344-1987, Recommended Practice for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations
- IEEE 387-1995, Standard Criteria for Diesel Generator Units Applied as Standby Power Generating Stations

Evaluation: (Acceptable)
Deletion of IEEE 344 is justified on the basis that it would impose specific requirements and seismic qualifications applicable to SDC systems, similar to safety systems in nuclear plants, but not applicable to the SDS systems in the RPP-WTP. The necessary requirements for SDS systems are properly covered by application of the 1997 Uniform Building Code, which is listed as implementing standard under Safety Criterion 4.1-2.

Deletion of IEEE 387 is justified on the basis that it would impose specific requirements and qualifications applicable to diesel generator units classified as SDS systems, similar to safety systems in nuclear plants, but not applicable to the SDS diesel generator units in the RPP-WTP. The necessary high quality requirements for SDS diesel generator units are properly covered by Safety Criterion 4.1-2, which stipulates that "…Structures, systems, and components designated as Important to Safety shall be designed, fabricated, erected, constructed, tested, inspected, and maintained to quality standards commensurate with the important to the safety functions to be performed."

3.3.5 Proposed change to SRD Safety Criterion 4.4-21:

Description of Change:
Delete IEEE 382-1985, Standard for Qualification of Actuators for Power Operated Valve Assemblies with Safety Related Functions for Nuclear Power Plants.

Evaluation: (Acceptable)
Deletion of IEEE 382 is acceptable because it would impose specific environmental qualification requirements that are applicable to nuclear power facilities, but not applicable to the WTP. The deletion of IEEE-382 is not inconsistent with the requirements of Safety Criteria 4.4-2 which requires all Structures, Systems and Components, including Power Operated Valve Assemblies, be designed and qualified to function as intended in the environments associated with the events for which they are intended to respond. The listing of IEEE-323 as one of the implementing standards for SC 4.4-2 ensures that the particular environmental conditions applicable to the WTP are adequately considered in the qualification of any SSCs, including Power Operated Valve Assemblies.

3.4 24590-WTP-ABCN-ESH-02-008

3.4.1 Proposed change to SRD Safety Criterion 2.0-2:

Description of Change:
- Replace, “ERPG-2 concentrations (AIHA 1999)” with, “2001 American Industrial Hygiene Association (AIHA) Emergency Response Planning guideline-2 (ERPG-2) concentrations.”
- Replace, “ERPG-3 concentration (AIHA 1999)" with, "2001 AIHA ERPG- 3 concentrations."
- Replace, “DOE Temporary Emergency Exposure Limits (TEELs) may be used as substitute ERPGs.” with, “2001 DOE Temporary Emergency Exposure Limits (TEELs) Revision 17m shall be used as substitute ERPGs.”

Evaluation: (Acceptable)
These revisions are acceptable because updated standards reflect the most current emergency management information from the industry for chemical consequence thresholds for Safety Analysis assessments. In addition, ERPGs and TEELs are top-level emergency management advisory standards and are not regulatory in nature.

3.5 24590-WTP-ABCN-ESH-02-009

3.5.1 Proposed change to LCAR Section 1.3.1.2.5:

Description of Change:
Add authorization for doing ITS soil compaction testing for any area on the site to LCAR Section 1.3.1.2.5

Evaluation: (Acceptable)
The proposed change is acceptable because it does not alter any standard currently included in the Safety Requirements Document (SRD), nor does it impact the required soil conditions to support ITS design requirements. Soil compaction testing will be performed to the same standards that have been reviewed and approved in the LCAR. Performing additional soil compaction testing is consistent with the compaction testing process that was previously determined to ensure the facility soil properties will be consistent with the assumptions in the design and safety analysis. Conformance to top-level safety standards is maintained by this proposed change.

4.0 CONCLUSION

Based on OSR’s evaluation of the proposed changes, described above, OSR has found the proposed changes to be acceptable (with the exception of the statement identified in section 3.2.3, above), and has concluded that there is reasonable assurance that the health and safety of the public and the workers, and the environment will not be adversely affected by the proposed changes.

Furthermore, OSR has determined that the proposed changes comply with applicable laws, regulations, and RPP-WTP contractual requirements. Deletion of the unacceptable statement identified in section 3.2.3, above, is a condition of approval.